

WHAT IS CLAIMED IS:

Sold

comprising:

1. A head for reading and writing data from and to a magnetic tape,
a first elongated chip assembly fixedly adhered to a second elongated
chip assembly;
- 5 a tape running surface formed in the longitudinal direction of said first
and second chip assemblies;
- 10 a read/write gap line for supporting a read/write element extending
longitudinally along said tape running surface on each of said first and second chip
assemblies; and
- 15 at least one groove formed on both sides of said read/write gap line on
each of said first and second chip assemblies and extending substantially parallel to
said read/write gap line.

* 2. The head as defined in claim 1 wherein each of said grooves have
a width which is greater than or equal to a width of a wall portion separating said
grooves on both sides of each said read/write gap line, and a depth which is greater
than or equal to said width of said grooves

3. The head as defined in claim 2 wherein said tape running surface
of said first and second chip assemblies have a curved portion along respective

circular lines having respective centers which are offset a predetermined distance from a center line where said first and second chip assemblies are joined.

4. The head as defined in claim 3 wherein said depth of said grooves are measured from a top of said curved portion of said tape running surface of corresponding said first and second chip assemblies, to a bottom of said grooves.

5. The head as defined in claim 1 wherein each of said first and second chip assemblies includes a first block having a substantially planar first surface and a second block having first and second surfaces, said first surface of said first block being attached to said first surface of said second block, and said second surface of said second block of said first chip assembly is adhered to said second surface of said second block of said second chip assembly.

6. The head as defined in claim 5 wherein said read/write gap line on each said first and second chip assemblies are formed in an area where said first block and said second block are joined.

7. The head as defined in claim 6 wherein said first block and said second block of said first chip assembly have substantially the same width, and said first block and said second block of said second chip assembly have substantially the same width.

8. The head as defined in claim 7 wherein said first chip assembly has substantially the same width as said second chip assembly.

9. The head as defined in claim 6 wherein a width of said first block of said first chip assembly is greater than a width of said second block of said first chip assembly, and a width of said first block of said second chip assembly is greater than a width of said second block of said second chip assembly

10. The head as defined in claim 9 wherein each of said first chip assembly includes one said groove formed on said second block and two said grooves on said first block.

11. The head as defined in claim 1 wherein each of said first and second chip assemblies includes one said groove formed on a first side of said read/write gap line and two said grooves formed on a second side of said read/write gap line.

12. A head for reading and writing data from and to a magnetic tape, comprising:

an elongated chip assembly;

a tape running surface formed in the longitudinal direction of said chip

5 assembly;

a pair of substantially spaced parallel read/write gap lines for supporting read/write elements extending longitudinally along said tape running surface of said chip assembly; and

at least one groove formed on said tape running surface on both sides of
10 each of said read/write gap lines and extending substantially parallel to said read/write gap lines.

13. The head as defined in claim 12 wherein each of said grooves have a width which is greater than or equal to a width of a wall portion separating said grooves on both sides of each said read/write gap line, and a depth which is greater than or equal to said width of said grooves.

14. The head as defined in claim 13 wherein said tape running surface of said chip assembly curves in a direction transverse to said longitudinal direction.

15. The head as defined in claim 12 further comprising one of said at least one groove formed on a first side of each said read/write gap line and two of said at least one groove formed on a second side of each said read/write gap line.